

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 August 2004 (26.08.2004)

PCT

(10) International Publication Number  
WO 2004/072257 A2

545193

BEST AVAILABLE COPY

(51) International Patent Classification<sup>7</sup>: C12N  
(21) International Application Number: PCT/US2004/003803  
(22) International Filing Date: 10 February 2004 (10.02.2004)  
(25) Filing Language: English  
(26) Publication Language: English  
(30) Priority Data:  
60/447,358 11 February 2003 (11.02.2003) US

(71) Applicant (for all designated States except US): EX-ELIXIS, INC. [US/US]; 170 Harbor Way, P.O. Box 511, South San Francisco, CA 94083-0511 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GENDREAU, Steven, Brian [US/US]; 2801 Turk Street #103, San Francisco, CA 94118 (US). MORABLANCO, Eva, Lorena [US/US]; 145 Manor Drive, San Francisco, CA 94127 (US). HEUER, Timothy, S. [US/US]; 581A Paloma Avenue, Pacifica, CA 94044 (US). LICKTEIG, Kim [US/US]; 1921 Grove Street, San Francisco, CA 94117 (US).

(74) Agents: SHAYESTEH, Laleh et al.; Exelixis, Inc., 170 Harbor Way, P.O. Box 511, South San Francisco, CA 94083-0511 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DYRKs AS MODIFIERS OF THE APC AND AXIN PATHWAYS AND METHODS OF USE

(57) **Abstract:** Human DYRK genes are identified as modulators of the APC and Axin pathways, and thus are therapeutic targets for disorders associated with defective APC and Axin function. Methods for identifying modulators of APC and Axin, comprising screening for agents that modulate the activity of DYRK are provided.

WO 2004/072257 A2